WHAT IS CLAIMED IS:

1. An optical head apparatus comprising:

an object lens which condenses light beams onto a recording surface of an information recording medium or the like which records information;

a lens holder which holds the object lens so as to be movable in an optical axis direction of the object lens and a direction parallel with the recording surface of the information recording medium;

a magnet which can provide a magnetic field having a predetermined polarity;

a flat coil which has a conductor composed of a metal foil or a metal pattern and formed into a coil shape on a sheet medium at a predetermined position of the lens holder and which generates a force in accordance with the magnetic field in order to move the lens holder at least in one of the optical axis direction and the direction parallel with the recording surface; and

a support member which supports the lens holder so as to be movable in predetermined directions.

2. The optical head apparatus according to claim 1, wherein the flat coil is formed by laminating a plurality of sheet mediums having the metal foil or the metal pattern formed thereon.

3. The optical head apparatus according to claim 2, wherein the flat coil includes a coil having

a first pattern which generates a thrust in a first direction in order to move the lens holder at least in the optical axis direction, and a coil having a second pattern which generates a thrust in a second direction orthogonal to the first direction in order to move the lens holder at least in the direction parallel with the recording surface.

4. The optical head apparatus according to claim 2, wherein the two or more flat coils are provided with a magnetic body sandwiched therebetween.

5. The optical head apparatus according to claim 2, wherein the flat coil includes a coil having a third pattern which generates a third thrust in order to move the lens holder in the first direction in accordance with a displacement of the first direction based on a rotation cycle of the recording medium.

6. The optical head apparatus according to claim 1, wherein the flat coil is formed by folding and laminating a plurality of sheet mediums having a predetermined shape to which the metal foil or the metal pattern is formed.

7. The optical head apparatus according to claim 6, wherein the flat coil includes a coil having a first pattern which generates a thrust in a first direction in order to move the lens holder at least in the optical axis direction, and a coil having a second pattern which generates a thrust in a second direction

orthogonal to the first direction in order to move the lens holder at least in the direction parallel with the recording surface.

8. The optical head apparatus according to claim 6, wherein the two or more flat coils are provided with a magnetic body sandwiched therebetween.

9. The optical head apparatus according to claim 6, wherein the flat coil includes a coil having a third pattern which generates a third thrust in order to move the lens holder in the first direction in accordance with a displacement of the first direction based on a rotation cycle of the recording medium.

10. An optical head apparatus comprising:

an optical head which has: an object lens which condenses light beams onto a recording surface of an information recording medium or the like which records information; a lens holder which holds the object lens so as to be movable in an optical axis direction of the object lens and a direction parallel with the recording surface of the information recording medium; a magnet which can provide a magnetic field having a predetermined polarity; a flat coil which has a conductor composed of a metal foil or a metal pattern and formed into a coil shape on a sheet medium at a predetermined position of the lens holder and which generates a force in accordance with the magnetic field in order to move the lens holder at least in one of the optical axis

direction and the direction parallel with the recording surface; and a support member which supports the lens holder so as to be movable in predetermined directions;

a photodetector which detects light beams reflected on the recording surface of the recording medium and converts them into an electric signal; and

an information processing circuit which reproduces information recorded in the recording medium from the electric signal outputted from the photodetector.

11. The optical head apparatus according to claim 10, wherein the flat coil is formed by laminating a plurality of sheet mediums to which the metal foil or the metal pattern is formed.

12. The optical head apparatus according to claim 11, wherein the flat coil includes a coil having a first pattern which generates a thrust in a first direction in order to move the lens holder at least in the optical axis direction, and a coil having a second pattern which generates a thrust in a second direction orthogonal to the first direction in order to move the lens holder at least in the direction parallel with the recording surface.

13. The optical head apparatus according to claim 11, wherein the two or more flat coils are provided with a magnetic body sandwiched therebetween.

14. The optical head apparatus according to claim 10, wherein the flat coil is formed by folding

and laminating a plurality of sheet mediums having a predetermined shape to which the metal foil or the metal pattern is formed.

15. The optical head apparatus according to claim 14, wherein the flat coil includes a coil having a first pattern which generates a thrust in a first direction in order to move the lens holder at least in the optical direction and a coil having a second pattern which generates a thrust in a second direction orthogonal to the first direction in order to move the lens holder at least in the direction parallel with the recording surface.

16. The optical head apparatus according to claim 14, wherein the two or more flat coils are provided with a magnetic body sandwiched therebetween.